Vermont Mental Health Performance Indicator Project

Agency of Human Services, Department of Health, Division of Mental Health Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601

MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project

Advisory Group and Interested Parties

FROM: John Pandiani and Stephen Morabito

DATE: September 17, 2004

RE: Behavioral Health Inpatient Data 2002

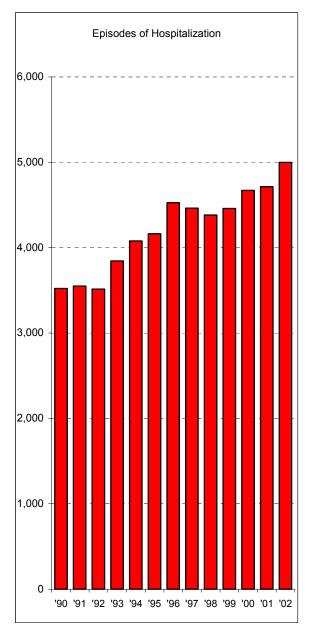
The Vermont Mental Health Performance Indicator Project has begun data analysis in preparation for the 2002 edition of our annual report on "Inpatient Behavioral Health Care Services Provided to Vermont Residents." This report will include a detailed description of service utilization patterns for the thirteen-year period, 1990-2002. This week's PIP provides three basic measures of inpatient mental health and substance abuse service utilization in Vermont for that time period. These measures include the number of episodes of care, the number of patient days, and the unduplicated number of individuals served. This information is provided for Vermont residents who received inpatient mental health and/or substance abuse services in Vermont, New Hampshire, Massachusetts, and neighboring counties of New York.

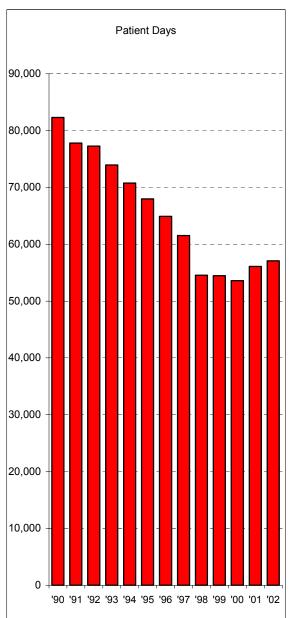
This report is based completely on analysis of existing databases. Data for this analysis were provided by the Vermont Department of Health, the Vermont State Hospital, and the Brattleboro Retreat (Vermont's only private psychiatric hospital). The data provided by the Department of Health were extracted from Vermont's Hospital Discharge Data Set (a data set available in most states) that includes detailed (but de-identified) information regarding all episodes of hospitalization for Vermont residents that occur in general hospitals and veterans' hospitals in Vermont and surrounding states. Because these data sets do not include unique person identifiers, Probabilistic Population Estimation was used to determine unduplicated counts of individuals served.

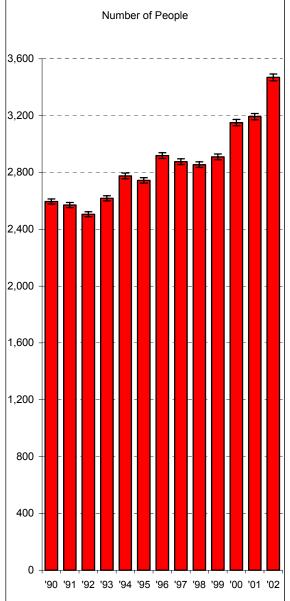
As you will see, this analysis indicates that there were significant increases in number of people served and episodes of care between calendar years 2001 and 2002 (+9% and +6%, respectively). The increase in the number of people served was greatest at the Brattleboro Retreat (+10%) and at Vermont general hospitals (+8%). The Vermont State Hospital recorded a decrease in the number of people served during this time period. The increase in the number of episodes of care was greatest at the "Other Out-of-State Hospitals" (38%) and the Veteran's Hospital in White River Junction (+14%). The Vermont State Hospital and New Hampshire general hospitals recorded decreases in the number of episodes of care during this time period.

We look forward to your comments and suggestions for future analysis of this very rich data set at pip@ddmhs.state.vt.us or call 802-241-2638.

INPATIENT BEHAVIORAL HEALTH CARE SERVICES Provided To Vermont Residents During 1990 - 2002







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INPATIENT BEHAVIORAL HEALTH CARE SERVICES Provided to Vermont Residents During 1990-2002

Episodes of Hospitalization by Hospital Type

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total | 3,523 | 3,550 | 3,515 | 3,846 | 4,079 | 4,164 | 4,528 | 4,464 | 4,382 | 4,459 | 4,671 | 4,714 | 5,000 |
| VT General Hospitals | 2,060 | 1,986 | 2,020 | 2,069 | 2,231 | 2,142 | 2,514 | 2,576 | 2,451 | 2,586 | 2,713 | 2,644 | 2,832 |
| Vermont State Hospital | 488 | 501 | 401 | 382 | 405 | 381 | 354 | 380 | 309 | 293 | 261 | 300 | 272 |
| Brattleboro Retreat | 226 | 242 | 256 | 346 | 377 | 519 | 639 | 678 | 761 | 712 | 850 | 937 | 997 |
| VA Hospital - WRJ | 218 | 224 | 235 | 241 | 260 | 254 | 236 | 236 | 236 | 255 | 260 | 228 | 260 |
| New Hampshire Hospitals | 494 | 553 | 504 | 662 | 703 | 730 | 679 | 482 | 500 | 503 | 492 | 474 | 458 |
| Other Out-of-State Hospitals | 37 | 44 | 99 | 146 | 103 | 138 | 106 | 112 | 125 | 110 | 95 | 131 | 181 |

Patient Days by Hospital Type

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total | 82,315 | 77,816 | 77,269 | 73,955 | 70,786 | 67,986 | 64,919 | 61,548 | 54,548 | 54,418 | 53,596 | 56,101 | 57,090 |
| VT General Hospitals | 22,835 | 22,066 | 22,287 | 21,291 | 20,962 | 19,498 | 20,034 | 19,781 | 18,114 | 20,054 | 19,075 | 19,599 | 20,246 |
| Vermont State Hospital | 41,265 | 37,143 | 35,130 | 31,602 | 27,778 | 27,059 | 23,452 | 23,827 | 19,961 | 19,815 | 17,963 | 19,039 | 20,394 |
| Brattleboro Retreat | 7,165 | 6,288 | 5,538 | 7,265 | 7,589 | 9,735 | 12,373 | 11,709 | 10,635 | 8,782 | 11,308 | 11,054 | 9,708 |
| VA Hospital - WRJ | 3,442 | 3,244 | 5,389 | 3,474 | 3,792 | 3,667 | 3,086 | 1,850 | 1,484 | 1,493 | 1,543 | 1,745 | 1,752 |
| New Hampshire Hospitals | 7,106 | 8,523 | 7,068 | 8,859 | 8,482 | 6,058 | 4,968 | 2,990 | 2,821 | 3,099 | 2,722 | 3,257 | 3,294 |
| Other Out-of-State Hospitals | 502 | 552 | 1,857 | 1,464 | 2,183 | 1,969 | 1,006 | 1,391 | 1,533 | 1,175 | 985 | 1,407 | 1,696 |

Unduplicated Number of People Hospitalized by Hospital Type

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Total | 2,596 <u>+</u> 18 | 2,571 <u>+</u> 18 | 2,506 <u>+</u> 17 | 2,618 <u>+</u> 18 | 2,776 <u>+</u> 20 | 2,744 <u>+</u> 19 | 2,919 <u>+</u> 20 | 2,876 <u>+</u> 20 | 2,855 <u>+</u> 20 | 2,910 <u>+</u> 20 | 3,151 <u>+</u> 22 | 3,193 <u>+</u> 22 | 3,469 <u>+</u> 24 |
| VT General Hospitals | 1,672 <u>+</u> 12 | 1,596 <u>+</u> 11 | 1,609 <u>+</u> 12 | 1,589 <u>+</u> 11 | 1,652 <u>+</u> 12 | 1,568 <u>+</u> 12 | 1,781 <u>+</u> 13 | 1,775 <u>+</u> 13 | 1,717 <u>+</u> 12 | 1,816 <u>+</u> 13 | 1,981 <u>+</u> 15 | 1,931 <u>+</u> 14 | 2,078 <u>+</u> 16 |
| Vermont State Hospital | 413 | 428 | 349 | 323 | 344 | 330 | 289 | 314 | 270 | 266 | 229 | 267 | 232 |
| Brattleboro Retreat | 204 | 212 | 215 | 267 | 296 | 421 | 486 | 536 | 485 | 560 | 692 | 743 | 819 |
| VA Hospital - WRJ | 171 <u>+</u> 2.4 | 174 <u>+</u> 2.4 | 164 <u>+</u> 2.2 | 187 <u>+</u> 2.4 | 192 <u>+</u> 2.8 | 200 <u>+</u> 3.0 | 182 <u>+</u> 2.7 | 146 <u>+</u> 2.0 | 141 <u>+</u> 2.0 | 147 <u>+</u> 2.0 | 169 <u>+</u> 2.0 | 157 <u>+</u> 2.0 | 161 <u>+</u> 2 |
| New Hampshire Hospitals | 374 <u>+</u> 3.3 | 410 <u>+</u> 3.5 | 386 <u>+</u> 3.4 | 495 <u>+</u> 4.3 | 558 <u>+</u> 4.7 | 546 <u>+</u> 4.5 | 480 <u>+</u> 4.1 | 374 <u>+</u> 4.0 | 395 <u>+</u> 3.0 | 379 <u>+</u> 3.0 | 346 <u>+</u> 3.0 | 356 <u>+</u> 3.0 | 359 <u>+</u> 3 |
| Other Out-of-State Hospitals | NA |
| | | | | | | | | | | | | | |

INPATIENT BEHAVIORAL HEALTH CARE SERVICES BY HOSPITAL TYPE 1990 - 2002

